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### (54) Method, computer program and system for interactive selling of insurance

(57) An interactive system and method of selling re-insurance involves preliminary steps of enrolling a plurality of primary insurers or cedents to use the system, formulating reinsurance proposals to make available to the cedents through the interactive system, posting the proposals on a secure server in the system and calculating and allocating risk capacity to the proposals and cedents. Each cedent is provided secure access to a list of proposals being made available to it. Upon selection and submission of a proposal by a cedent, the system server generates an acceptance notice, transfers the information on the proposal to a listing of agreements entered into by that cedent, recalculates the available allocated capacity and withdraws from availability any proposals whose acceptance would reduce the available allocated capacity below a selected amount.

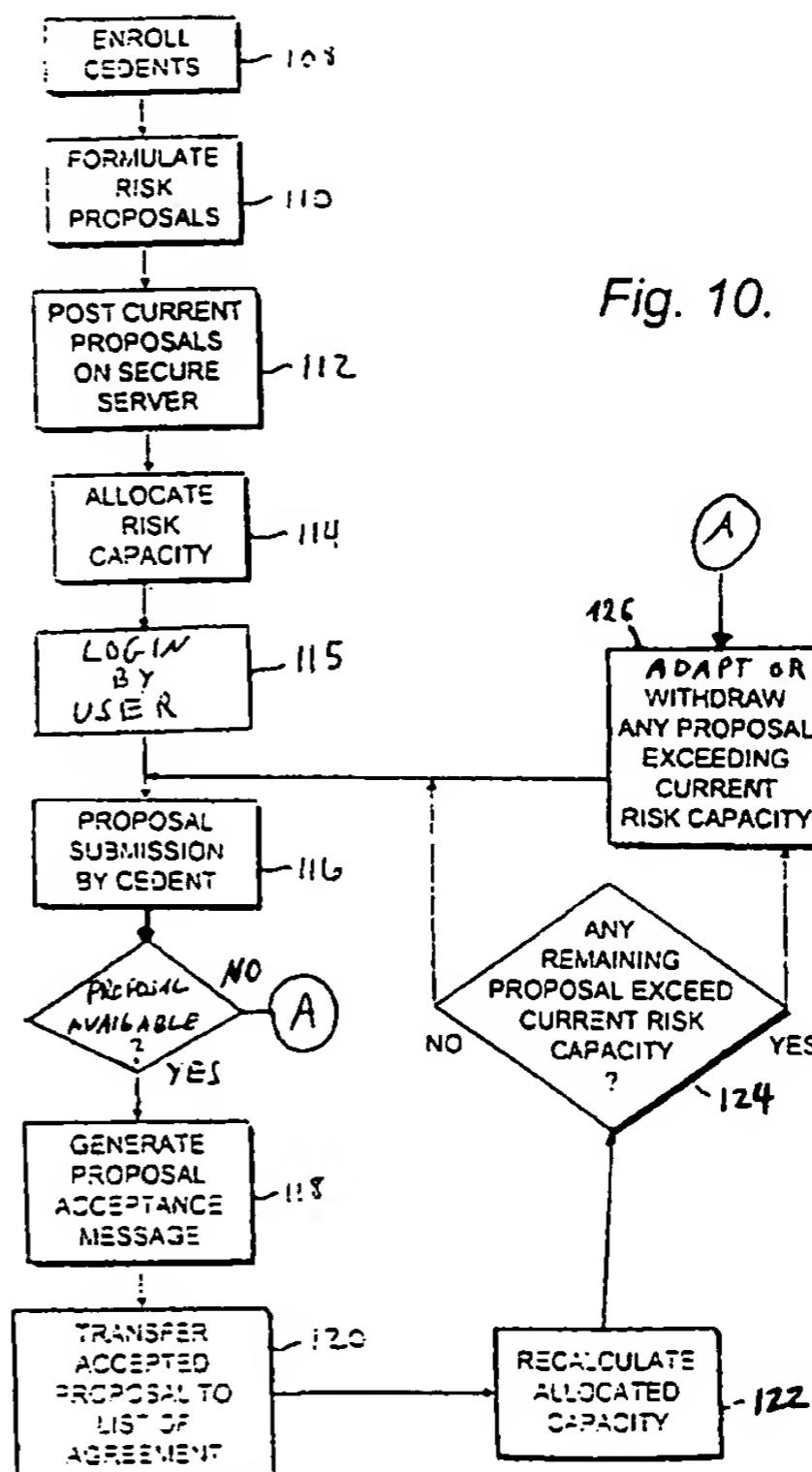


Fig. 10.

EP 1 115 075 A2

**Description****Background of the Invention**

[0001] The present invention relates to a method, a computer program and a system for interactive selling of insurance including reinsurance.

[0002] Insurance is used to redistribute risks. Insurers or risk carriers assume portions of the risks of their customers or insureds in exchange for premiums. Insureds may also be referred to as cedents in that they cede risks to a risk carrier or insurer. Reinsurance is used by insurance companies to redistribute their exposure to other insurers. In a reinsurance agreement, an insurer (often referred to as a primary insurer or ceding company) transfers or cedes some or all of its exposures and premiums to a reinsurer. The reinsurer then agrees to indemnify the ceding company for a predetermined type and amount of losses sustained.

[0003] It is important to understand that insurers, including primary insurers and reinsurers, are regulated as to the amount of insurance they can write, or risk that they can assume, based on the amount of surplus funds they hold. The capacity of an insurer generally refers to the monetary amount of insurance or risk of loss which the insurer can agree to cover based upon their surplus funds. An insurance company can increase its capacity to allow it to write more policies or to write policies with higher limits by reinsuring a portion of its covered risks.

[0004] There are two broad types of reinsurance contracts:

treaty and facultative. Treaty reinsurance involves an agreement in which the primary insurer agrees in advance to cede certain classes of business or types of insurance to the reinsurer. For example, part of the primary insurer's business may be aviation insurance, through which the primary insurer provides aviation insurance to multiple commercial airliners. Under a treaty reinsurance contract, the reinsurer would agree to reinsure some portion of the risk of all of the primary insurer's aviation insurance contracts. Individual risks are not underwritten or discussed; the reinsurer relies on the primary insurer to accept only risks that fall within acceptable underwriting criteria and reinsurance all risks that fall within the reinsurance treaty agreement. Facultative reinsurance, on the other hand, involves separate reinsurance agreements for each risk or policy that is being re-insured.

[0005] In addition to the broad types of reinsurance contracts, treaty or facultative, there are also various ways in which the parties may share or cede the risks. Two broad classifications of risk sharing arrangements are referred to as Proportional Arrangements or Excess Arrangements.

[0006] In a proportional agreement, a certain portion of every risk covered by the agreement is ceded. The primary insurer and reinsurer share a portion of all insurance, premiums and losses in the same amount. The

primary insurer is paid a commission in exchange for ceding the risk portion and premium to the reinsurer. A proportional agreement may be written on a quota share or surplus share basis.

5 [0007] In a quota share agreement, the primary insurer's retention (retained risk) is stated as a percentage of the amount insured. The insurer retains the same percentage of insurance, premium and losses and cedes the rest to the reinsurer, subject to a reinsurance limit.

10 [0008] In a surplus share treaty, the primary insurer's retention (retained risk) is stated as a fixed monetary amount of the amount insured. The primary insurer retains a fixed monetary amount of all insurance, premium and losses that fall within the agreement and cedes the rest to the reinsurer. In either case, a commission is typically paid to the insurer in return for the premium ceded.

15 [0009] To illustrate the differences between quota share and surplus share, assume that a primary insurer wants to write a policy for a property risk valued at \$1,000,000. In a quota share arrangement with a 25% retention, the primary insurer would retain \$250,000 of the property risk and cede \$750,000 to the reinsurer. However, if the property risk were valued at \$2,000,000 under the same quota share arrangement, the insurer

20 [0010] would retain \$500,000 and cede \$1,500,000. In a surplus share treaty, the primary insurer may choose to retain \$250,000 of each property risk insured. The primary insurer thus would retain \$250,000 on both a \$1,000,000 property risk, ceding \$750,000, and on a

25 [0011] \$2,000,000 property risk, ceding \$1,750,000.

30 [0012] [0009] In an excess reinsurance agreement, only losses are ceded to the reinsurer. The primary insurer retains the amount of insurance and premium, and commissions are not normally paid. Three standard types of excess agreements are per risk excess, per occurrence excess, and aggregate (stop loss) excess.

35 [0010] [0011] In an aggregate excess agreement, the retention is calculated based on all losses over a period of time stated in the agreement. The retention may be stated in a monetary amount, a loss ratio, or some combination of the two.

40 [0011] [0012] In per risk excess arrangements, losses above a certain monetary amount are ceded to the reinsurer, which is responsible for all losses from any one exposure above this monetary amount up to the reinsurance limit. Per occurrence or per loss excess arrangements are similar to per risk arrangements. However, the retention is stated as an amount incurred per occurrence.

45 [0012] An occurrence may be one hurricane, one flood or one accident that results in liability claims.

50 [0013] [0014] The difference between per risk and per occurrence excess can be illustrated in the following example in which a hurricane damages 100 covered homes in a given area. If the primary insurer ceded the losses on a per risk basis with a \$10,000 retention, it would be responsible for the \$10,000 retention on each of the 100 homes, or \$1,000,000. However, on a per occurrence basis, the primary insurer may have retained \$250,000

per occurrence, in which case the primary insurer would have to pay \$250,000 and the reinsurer would be responsible for the rest of the losses up to the reinsurance limit.

[0013] Original Loss Warranty ("OLW") protection is a type of per occurrence excess agreement in which the reinsurer pays the reinsurance cover amount only if the total amount of a covered loss exceeds a set amount or trigger point. OLW protection is often utilized in high risk insurance such as aviation, space and energy/marine. In such high risk insurance, the risk is often spread among multiple carriers, each covering a portion of the total risk.

[0014] The following example is provided to illustrate possible application of OLW protection in a high risk insurance, namely aviation insurance.

[0015] A primary insurer of International Airline accounts seeks reinsurance for its portfolio of aviation insurance contracts. The primary insurer's portfolio includes a 10% line (i.e. it receives 10% of the premiums and must pay 10% of each claim) on aviation insurance for a first airline which runs for 12 months beginning on January 1, a 5% line on aviation insurance for a second airline, effective 12 months beginning on April 1; and numerous other insurance policies with different various percentages of participation and policy periods. The primary insurer's exposure out of these various contracts is very high and the primary insurer seeks reinsurance to reduce its exposure.

[0016] OLW protection for such a portfolio might be structured such that the reinsurance contract provides for a cover amount of \$3,000,000 if any one of the insureds covered by an aviation insurance policy in the primary insurer's portfolio has a loss which exceeds a trigger point of \$750,000,000 during the period of the reinsurance contract in exchange for a premium of \$800,000. It does not matter which of the primary insurer's insureds suffers the loss, nor the primary insurer's participation in the insurance contract of the insured suffering the loss. If a loss occurs during the reinsurance policy period which exceeds the trigger point, the reinsurer pays the reinsurance cover amount.

[0017] Historically, reinsurance contracts have been initiated by the primary insurer, or by a broker on behalf of the primary insurer, which approaches a reinsurer and requests coverage of a certain amount of its portfolio. An underwriter for the reinsurer then evaluates performance data for the primary insurer and evaluates the risk associated with the requested reinsurance amount and decides how much coverage or capacity the reinsurer is willing and able to offer and under what financial and legal terms. This offer is then either accepted or declined by the cedent. This process is typically effected by telephone, fax, letter and personal contact and may involve ongoing negotiations as to the financial and legal terms or the amount of capacity offered. These are essentially the same methods used for selling most types of insurance.

[0018] The historical method of marketing or selling insurance, including reinsurance, limits the ability of the insurer to be proactive in its effort to sell its insurance services and often results in inefficiencies in utilization of the insurer's capacity.

[0019] The historical method of marketing or selling reinsurances results in that there is no or not much standardization. Therefore, no "technical" marketing or selling of reinsurances is possible, unlike it is possible with more standardized life insurances, health insurances, car insurances and the like.

[0020] Additionally, a standard e-shop software is not applicable to reinsurance selling. One reason is, beside others, that it is not possible to implement the specific conditions for reinsurance selling such as the fact that a specific reinsurance should not be sold to a cedent.

[0021] However, there is need for a technical solution of these problems, i.e. the need for a technical implementation of non-standard insurance selling like reinsurance selling.

#### Summary of the Invention

[0022] It is an object of the invention to provide a method, a computer program and a system for assuming/ceding monetary risks more efficiently, which is suitable in particular for interactive selling of reinsurance.

[0023] This object is achieved by a method according to claim 1, a computer program according to claim 13, and a system according to claim 15.

[0024] Further developments of the invention are indicated in the dependent claims.

[0025] The invention makes possible an automatized selling of insurance capacity and/or an automatized processing of insurance contracts in connection with reinsurance.

[0026] The method, the computer program and the system are particularly well adapted for use in forming reinsurance contracts. In particular, reinsurance needs a customized "tailoring" of the reinsurance to the risk on the one hand side and to the capacities of the reinsurer and the further risks taken by the reinsurer on the other hand resulting in different needs in comparison to the much more standardized life, health, car insurances and the like, which different needs are met by the invention in an automatized manner.

[0027] Other objects, features and advantages of this invention will become more apparent from the following description of embodiments taken in conjunction with the accompanying drawings, of which:

Fig. 1 is a block diagram illustrating an interactive system for use in practicing the method of the present invention including a system server;

Fig. 2 is a user specific entry page generated by the system server and viewable by a user of the interactive system providing links to other pages;

Fig. 3 is a user specific Proposals page generated

by the system server and providing a listing of proposals available to the user with a specific proposal selected;

Fig. 4 is a user specific Agreements page generated by the system server and providing a listing of existing agreements for reinsurance;

Fig. 5 is a Proposal Details page generated by the system server and corresponding to the proposal selected in Fig. 3;

Fig. 6 is a Submit Proposal page generated by the system server for use in submitting the proposal selected;

Fig. 7 is a Acceptance Confirmation page generated by the server to confirm acceptance of the proposal submitted;

Fig. 8a is revised Proposals page generated after acceptance of the proposal selected in Fig. 3;

Fig. 8b is an alternative version of the revised Proposals page generated after acceptance of the proposal selected in Fig. 3;

Fig. 9 is a revised Agreements page generated after acceptance of the proposal selected in Fig. 3; and Fig. 10 is a flow chart of the steps of the interactive system and method of entering into contracts for the assumption of risks.

**[0028]** Referring to the drawings, Figure 1 is illustrative of an interactive system or computer network 1 for use in carrying out the methodology of the present invention for marketing and selling insurance and in particular reinsurance. Although the network 1 shown and described utilizes the internet, it is to be understood that the methodology of the present invention could be practiced utilizing other computer or communications networks.

**[0029]** The preferred embodiment is described with reference to sales of OLW (original loss warranty) type reinsurance. However, it is to be understood that the methodology and system of the present invention can be utilized to sell in particular other forms of reinsurance, or more general for selling insurance and/or for entering into agreements to assume risks of others.

**[0030]** The network 1 is preferably conventional for internet applications and includes a database 5, an application server 6, a web server 7 and a firewall 8 which are selectively accessible through the internet 9 from computers 10 of end users. As used herein the database 5, the application server 6, web server 7, firewall 8 and software run thereon to store, provide access to and manipulate data stored in the database 5 or on the servers 6 and 7 and 8, may collectively be referred to as a server or system server 15. The system server 15 is generally assembled, operated, maintained and connected to the internet 9 by or under the authority of a reinsurer.

**[0031]** The end users comprise existing and/or potential clients or customers of a reinsurer or their brokers, representatives or agents. The customers may also be referred to as cedents or primary insurers. The custom-

ers use web browsers on their computers 10 to connect to the system server. The system server 15 responds to requests and commands received from the end user's browser, to generate pages responsive thereto as part of the methodology of the present invention.

**[0032]** Implementation of the interactive system and method requires some preliminary steps which do not necessarily occur sequentially, may occur simultaneously or may occur intermittently over an extended period of time.

**[0033]** In a first preliminary step, the reinsurer determines its overall capacity or the monetary value of risks that it can assume or wants to assume (in the following referred to as overall capacity). A reinsurer's capacity is typically calculated on an annual basis just prior to the time for negotiating new or renewing old contracts. Annual basis does not mean that it is calculated once a year but for a one year period. Of course, the capacity is updated throughout a calendar year based on the actual data.

**[0034]** In a second preliminary step, the reinsurer determines what types or classes of reinsurance it intends to sell utilizing the interactive system 1. In the second preliminary step, the reinsurer may determine what portion of its overall capacity it wants to allocate to each type or class of reinsurance (in the following referred to as capacity per class).

**[0035]** In a third preliminary step, the reinsurer selects cedents, or their representatives, to utilize the interactive system to purchase reinsurance from the reinsurer. The reinsurer sets up separate data records, accounts or files for each primary insurer or user in the system server 15.

**[0036]** The reinsurer provides a selected user with a unique user identification designation (User ID) and a password to provide the user secure access to selected information in the system server 15.

**[0037]** In a fourth preliminary step, the reinsurer also determines a capacity for each cedent (in the following referred to as cedent capacity). The cedent capacity generally comprises the maximum risk of loss the reinsurer is willing to assume from a particular cedent. The cedent capacity will vary by cedent.

**[0038]** Additionally, in a fifth preliminary step, the reinsurer determines capacities per class per cedent, i.e. the maximum risk of loss the reinsurer is willing to assume for a particular cedent in the specific classes of reinsurance (aviation, marine, etc.). The sum of all capacities per class of one cedent is not necessarily identical to the capacity per cedent but may be different.

**[0039]** In a sixth preliminary step, the reinsurer prepares or formulates proposals (orders) comprising the financial and legal terms of reinsurance contracts it is willing to enter into in the classes of reinsurance it intends to sell through the interactive system 1. The reinsurer will typically utilize established contract language for the proposals and vary the financial terms depending on then current market conditions and its current capac-

ity.

[0040] In a seventh preliminary step, the reinsurer also determines a capacity which is allocated to each type of proposal (in the following referred to as capacity per type of proposal). For example, if the reinsurer allocates ten million dollars in risk assumption for the first aviation proposal and the covered amount or risk of loss for each of the first aviation policies is two million dollars (quoting), the reinsurer only has the capacity to enter into five contracts based on the first aviation proposal. This capacity is referred to in the following as per occurrence capacity.

[0041] In an eighth preliminary step, based on the underwriting or evaluation of the insurance portfolios, as well as other business considerations, the reinsurer will determine which proposals to make available to which cedents.

[0042] For example, the reinsurer may have two separate proposals to provide reinsurance for aviation insurance portfolios and ten different selected primary insurers who have aviation insurance portfolios. The reinsurer may decide to make a first aviation proposal available to all ten of the primary insurers and a second aviation proposal available to only six of the primary insurers.

[0043] The decision on which cedents to make available certain proposals will depend in large part on underwriting considerations and an understanding of the cedents' business. As part of the preliminary steps, the reinsurer evaluates insurance portfolios of each of the selected primary insurers or cedents for which it is considering making available reinsurance capacity. An insurance portfolio generally refers to all of the insurance policies issued by an insurer which fall within a specific class of business. More specifically, an insurer's insurance portfolio may refer to all of the insurance policies issued by an insurer which fall within the criteria for the type of insurance for which the reinsurer is willing to make available a proposal for reinsurance. As an example, for OLW coverage for worldwide aviation lines, an insurer's portfolio would be all of its aviation policies providing worldwide coverage which are in force during the proposed term of reinsurance coverage.

[0044] In a ninth preliminary step, the proposals are entered into the system server 15, and the system server 15 is programmed to associate each of the proposals with selected cedents, as determined by the reinsurer, such that the proposals are viewable by end users on their computers 10 as discussed in more detail below. The terms of the proposals may be modified at appropriate intervals, such as to modify the proposal language in response to changes in the law or to clarify certain provisions of the proposals.

[0045] In a tenth preliminary step, the values for the per occurrence capacities and the cedent capacities are entered into the system server 15 and collectively may be referred to as the allocated capacity. The available allocated capacity generally refers to the amount of al-

located capacity which remains available at any given time and which the reinsurer or risk carrier has not yet utilized through entering into an agreement with a cedent.

5 [0046] In the following, the steps of determining the different capacities are explained referring to a specific example. At first, the reinsurer determines its overall capacity (capacity 1). This overall capacity is divided into portions, which portions are allocated to the different classes of reinsurance. One class of reinsurance is, for example, aviation reinsurance. These portions of the overall capacity are the capacities per class (capacities 2). Furthermore, the reinsurer determines capacities per cedent (capacities 3), which are maximum capacities per cedent for all classes. Then, the reinsurer determines capacities per class per cedent (capacities 4), and capacities per type of proposal (capacities 5). In the following, it is assumed that a reinsurance A has an overall capacity of \$ 100,000,000, of which 10 %, namely \$ 10,000,000 are allocated to aviation reinsurance, i.e. represent the capacity for aviation (capacity per class). The reinsurer determines the cedents, i.e. the primary insurers, which should receive proposals for reinsurance. In the example, it is assumed that these are 10 the primary insurers B, C, D und E. The reinsurer determines a capacity per cedent.

15 [0047] The reinsurer determines a capacity per cedent for aviation reinsurance. For example, primary insurer B receives a maximum capacity for aviation reinsurance of \$ 4,000,000, primary insurer C of \$ 8,000,000, primary insurer D of \$ 0 and primary insurer E of \$ 3,000,000. It is obvious that the overall sum of the capacities per cedent per class may exceed the capacity per class. Furthermore, assuming that primary insurer 20 B has a capacity per cedent for all classes (capacity 3) of \$ 7,000,000 and has additional capacities per cedent per class for other classes (sum of capacities 4 of B except capacity 4 for aviation) of \$ 10,000,000, the sum of all capacities per cedent per class of primary insurer B exceeds its capacity per cedent for all classes.

25 [0048] It is assumed that the proposals for reinsurances are already prepared. It is assumed that the reinsurer provides five proposals numbered 1 to 5. Now, the reinsurer determines a capacity per type of proposal, i.e. a capacity for proposal 1, a capacity for proposal 2, and so on. In the example, we assume that each of the proposals has a capacity of \$ 3,000,000. That means, the sum of capacities per type of proposal exceeds the capacity per class (for aviation) by \$ 5,000,000.

30 [0049] Each of proposals 1 to 5 is quoted, that means has a maximum risk coverage. For example, proposal 1 has a maximum risk coverage of \$ 1,000,000, whereas proposal 5 has a maximum risk coverage of \$ 1,500,000.

35 [0050] As it is obvious from the above, the reinsurer determines different fixed capacities, up to which risks can be assumed and which have to be monitored, if a risk is assumed from a cedent. These capacities are in-

put into the system, in a manner described later.

[0051] The preparation of a plurality of proposals on the one hand and the determination of capacities, preferably as capacities per cedent per class, more preferably in combination with a capacity per cedent, on the other hand, makes the technical implementation of the reinsurance selling possible at all. The "tailoring" of the reinsurance to the risk and to the capacities of the reinsurer is made possible by formulating a plurality of proposals which in their sum exceed the overall capacities of the reinsurer and by determining specific capacities. Now, the technical implementation is possible, because the system may autonomously agree to contracts by monitoring the sum of ceded risks using the determined specific capacities.

[0052] It is important to recognize that the preliminary steps described above are not present in conventional reinsurance selling but developed in view of the necessities of a technical implementation.

[0053] Figure 10 comprises a flow chart summarizing the main steps of the method according to a first embodiment of the present invention. Block 108 corresponds to the step of identifying and enrolling potential customers or cedents to utilize the interactive system 1. Block 110 corresponds to the step of formulating or developing risk assumption proposals, which can occur simultaneously with or even before the step of identifying and enrolling potential customers as shown in block 108. Block 112 corresponds to the step of posting on a secure server proposals which are to be made available to selected cedents. Risk capacity is allocated to the proposals and the cedents as shown by block 114 and initialized on the server. The steps in blocks 108 to 114 correspond to the preliminary steps described above.

[0054] In step (Block) 115, a user (cedent or broker) authorized to use the interactive system (see the third preliminary step) logs into the system. When an authorized user logs into the system, the system checks the availability of each proposal for the user as described later and makes only those proposals available for view which passed the check. Block 116 corresponds to the step of selecting and electronically submitting a proposal by the user of the interactive system 1. In step 117, the system checks whether the proposal is still available for acceptance, and if so, proceeds to step 118 or, if not, generates a screen message that the proposal is not available anymore and proceeds to step 126. Generation of an electronic acceptance confirmation message by the system server 15 upon submission of a proposal which is accepted is shown by Block 118. Upon acceptance of a proposal, the data associated with the accepted proposal is transferred to or included in a list of agreements as indicated by block 120. Simultaneously therewith, the system server recalculates the allocated risk capacity as shown by block 122. The server 15 then determines whether the required capacity of any remaining proposals exceeds the allocated risk capacity as recalculated, as represented by the decision block 124. The

remaining proposals whose required capacity exceeds the allocated risk capacity are electronically withdrawn from availability or adapted to the remaining capacities as shown by block 126. The steps of the method are

5 then repeated from the point where proposals are submitted by cedents as represented by block 116. These steps are now explained in detail.

[0055] Once the preliminary steps are completed, the users are notified that the system 1 is available for use.

10 Alternatively, the selected users could be notified that the system 1 will be available for use on a predetermined date by which the reinsurer will have completed the preliminary steps. The preliminary steps will be repeated on a continuous basis which may be a freely selectable

15 basis or a regular basis an hourly, a daily, a weekly or an annual basis, as it is necessary.

[0056] To access the proposals on the system 1, a user or cedent, connects to a login page (not shown) generated by the system server 15. Following prompts, the

20 user enters its User ID and password and clicks on a login button or enter button to access pages containing information on proposals being made available to it and to access pages on reinsurance contracts it has already entered into with the reinsurer (step 115). Upon

25 clicking the login button, a user specific entry page 18 (See Fig. 2) is generated for view by the user. The entry page 18 includes a button bar 19 with buttons to link to other pages including a Proposals button 20 to link to a user specific Proposals page 21 (See Fig. 3) and an

30 Agreements button 22 to link to a user specific agreements page 23 (See Fig. 4). As will be discussed in more detail below, the Proposals page 21 includes a listing of proposals which are currently available for consideration, and the Agreements page 23 provides a similar listing of reinsurance agreements which the parties have entered into and are in force.

[0057] Buttons are also provided on the button bar 19 of the entry page 18 to link to non-user specific pages (not shown) including a Home page for the reinsurer, a

40 Contact Us page providing information to contact the reinsurer and e-mail links for the reinsurer, a Terms and Conditions page providing the terms and conditions of use of the interactive system 1, a Help page providing information to assist in use of the interactive system 1 and a Logout page. In a preferred embodiment, the users enter into a written agreement with the reinsurer covering use of the interactive system 1 before the system is made available to the user for use.

[0058] Clicking, selecting or pushing on the Proposals 45 button 20 causes the server 15 to generate the user specific Proposals page 21. The system checks which proposals are still available at all. This check is performed such that the per occurrence capacity is checked. The per occurrence capacity is entered as a maximum value

50 for a counter. Every time the specific proposal is submitted and accepted, the counter is incremented, and when the counter reaches the maximum value, the proposal is withdrawn from availability. Furthermore, if the user

accepted the proposal already once, in this embodiment the proposal is not available anymore for the user, independent of the per occurrence capacity. Then the system checks whether the capacity per class per cedent and/or the available capacity per cedent are equal to or higher than the maximum risk coverage of the proposal. If not, the system may be programmed to either withdraw the proposal (version 1) or to adapt the proposal to the lower one of the available capacities of the cedent (version 2). For example, if the remaining total capacity of the user is 2.5 million dollars, and the remaining aviation capacity of the user is 1 million dollars but the maximum risk coverage proposal is 2 million dollars, the system reduces the maximum risk coverage of the proposal (only for this user) to the available 1 million dollars. An exemplary Proposals page 21 for user XYZ, Inc. (which could be one of primary insurers B to E from the above example) is shown in Figure 3. The Proposals page 21 provides a listing 28 of each of the proposals currently available for consideration by the specific cedent which, in the example shown, is XYZ, Inc.

[0059] The listing 28 is generally presented in a table format, with each row 30 summarizing the main terms of each separate proposal. Listing 28, in Fig. 3, includes five proposals in rows 30a-e.

[0060] The first column 31 of each row includes a selection button or icon 32 over which a cursor can be positioned and clicked or activated to select the proposal as summarized in that row 30. As indicated in Fig. 3, by the dot 33, the proposal corresponding to the first or upper row 30a has been selected.

[0061] Specific information or terms concerning each proposal are provided in remaining columns 35 under the appropriate headings, including the "Class of Business" or line of insurance, the original loss warranty amount or "OLW" in millions of dollars, the reinsurance amount or "Limit Upfront", the "ROL Upfront" or rate on line which is used to calculate the premium, the "Cover Basis" (such as L.O.D. = Losses Occurring During or L.O.R.A. = Losses Occurring Risks Attaching), the beginning date ("Term from") and ending date ("Term to") of the policy term, the "Territory", the "Reinstatement" rate (the reinstatement date  $x@y\%$  defines the additional premium for a reinstatement of the coverage such that a reinstatement is made  $x$ -times after a coverage event for a rate on line of  $y\%$ ) and the event "Coverage" (this term defines after how many insured events the insurance is paid, for example first event means that already the first coverage event results in payment of the reinsurance whereas second event means that the first event is not covered but only the second coverage event).

[0062] A Details button 36 and a Refresh button 37 are also provided on the Proposals page 21. Clicking on the Refresh button 37 reloads the user specific Proposals page 21 to permit the user to verify that all of the proposals listed remain available and have not been withdrawn from consideration as will be discussed in

more detail below. Clicking on the Details button 36, after selecting a proposal by clicking on the corresponding selection button 32, causes the server 15 to generate Proposal Details pages 40 as generally shown in Fig. 5.

- 5 The Proposals page 21 may include additional information including instructions on how to select a proposal and link to the Proposal Details pages 40 for each proposal, instructions on how to submit a proposal as an offer for acceptance, or instructions on contacting the reinsurer if no proposals are listed as being available or if the user has additional questions concerning use of the system 1.
- 10

[0063] Fig. 5 shows a first page 41 of the Proposal Details pages 40 corresponding to the proposal shown as selected in Figure 3. The page 41 includes a partial listing 43 of the terms of the selected proposal corresponding to the terms as shown on the Proposals page 21. Additional terms may also be included in this listing 43. For example, listing 43 includes a term generally referred to as the "Priority" for the proposal which relates to the liability of the reinsurer if and when the loss paid by the cedent for the loss exceeds the Priority amount. Other terms may be listed elsewhere on the page 41 including when payment is due.

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  - 40
- [0064] A variable coverage box 45 is provided on page 41, in association with the heading for Limit Upfront, to allow the user to vary the Limit Upfront or coverage amount. In particular, by clicking on the drop down arrow or icon 46, a drop down box (not shown) appears providing alternative coverage amounts in decreasing value. For example, the values shown in the drop down box for selection box 45 could range in descending order in one million dollar increments from six million dollars to one million dollars. To select a different value for the Limit Upfront, the user, places the cursor on the selected amount and clicks on that amount, which will then appear in the selection box 45 and the drop down box will disappear. The default value in the selection box 45 is the maximum amount of coverage available through the proposal.

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  - 50
  - 55
- [0065] The first page 41 (Fig. 5) of the Proposal Details pages 40 also provides a Yes/No selection box 48 for the user to indicate whether a broker will be involved in the sale and if so a broker identification box 49 is provided to allow the user to fill in the name and address of the broker or other requested information. A Your Reference box 50 is provided for the user to fill in a reference number or code selected by the user to identify the proposal or resulting transaction. There are certain primary insurers which are not allowed to cede a risk without involving a broker registered at a syndicate. Such an example are certain primary insurers and brokers registered at Lloyds. In case of such a primary insurer, the system is programmed such that the proposal is not accepted, if no broker is identified in broker identification box 49.

[0066] At the bottom of page 41 a listing 54 of headings for applicable contractual clauses for the proposal

is provided. The listing 54 carries over to additional pages of the Proposal Details pages 40 (or additional portions of the first page 41) which are not shown. A Wording button 55 is positioned adjacent each heading in the listing 54 of applicable clauses. The user clicks on the Wording buttons 55 to generate additional pages (not shown) including the full text of the selected clause. Any of the pages generated by the server may be printed by the user on a printer associated with the user's computer 10.

[0067] The first page 41 of the Proposal Details pages 40 also includes a Next button 60 and a Cancel button 61. Selecting or pressing the Cancel button 61 cancels any of the changes made to the Proposal Details page 40 in boxes 46, 48, 49 or 50, and returns the user to the Proposals page 21.

[0068] Instructions 63 are provided on the first page 41 of the Proposal Details page 40 instructing a user on how to submit a proposal for acceptance. The instructions 63 generally instruct the user to enter data where requested and to click on the Next button 60 to submit the proposal corresponding to the information presented on the Proposal Details page 40. Clicking on the Next button 60 causes the system server 15 to generate a corresponding Submit Proposal page 65 as generally shown in Fig. 6.

[0069] The Submit Proposal page 65 includes a listing 68 of the basic terms of the proposal, including data entered by the user. For example, the Limit Upfront shown on the Submit Proposal page 65 corresponds to the Limit Upfront selected by the user on the Proposal Details page 40. Other data entered in the Proposal Details page 40 is also displayed on the Submit Proposal page 65 including whether a broker will be involved, and if so, the broker's name and address, and the users reference code. The Submit Proposal page 65 provides the user a final opportunity to review the basic terms of the proposal prior to submission for acceptance.

[0070] The Submit Proposal page 65 also includes a submit button 71, a back button 72 and a cancel button 73. Clicking on the cancel button 73, returns the user to the Proposals page 21 and cancels any of the changes made to the Proposal Details page 40 in boxes 46, 48, 49 or 50. Clicking on the back button 72 returns the user to the corresponding Proposal Details page 40. The user may elect to return to the Proposal Details page 40 to change data entries or confirm wording of some of the clauses of the proposal. Instructions 75 are also provided on the Submit Proposal page 65 instructing the user to review the basic or general terms and then click the submit button 71 if the user wants to submit the proposal for acceptance.

[0071] When the user clicks on the submit button 71, the system server 15 generates an acceptance confirmation page 78 (See Fig. 7) if the proposal was still available at the time of submission. It is possible that a proposal could be withdrawn from availability to a user while viewing the Submit Proposal page 65. For exam-

ple, when another user accepted the proposal and the remaining risk capacity was reduced to an amount not allowing further acceptance. When the user then clicks on the submit button 71, the user will receive an error message. The error message may indicate that the proposal is no longer available for acceptance or may simply instruct the user to call the reinsurer to determine why an error message was received. Such an error message may be a page (not shown) which include a button to return the user to the Proposals page 21 or other pages.

[0072] The acceptance confirmation page 78 includes a message 79 indicating the proposal has been accepted and the contract closed. The acceptance confirmation page 78 provides a reinsurer reference number 80 which is assigned to the policy or contract by the system server 15 upon acceptance. Page 78 also includes a Print Premium Closing button 82, a Print Covernote button 83, a Proposals button 84, an Agreements button 85 and a Logout button 86.

[0073] Clicking on the Print Covernote button 83 provides the ceding company with the opportunity to print a copy of the contract or policy corresponding to the accepted proposal on a printer associated with the users computer 10. Clicking on the Print Premium Closing button 82 provides the ceding company with the opportunity to print a billing document for the policy or contract indicating the amount of the premium and indicating when it is due. The system server calculates the premium upon submission of a proposal. In the example shown, the premium is calculated by multiplying the selected coverage amount (Limit Upfront) by the listed rate or percentage identified as ROL Upfront.

[0074] Clicking on the Proposals button 84 regenerates the Proposals page 21. Clicking on the Agreements button 85 generates or regenerates the agreements page 23, and clicking on the Logout button 86 logs the user out of the user specific pages, and returns the user to the login page (not shown) or the Reinsurer's home page (not shown).

[0075] In addition to generating the acceptance confirmation page 78, clicking the submit button 71 on the Submit Proposal page 65, causes the system server 15 to perform several other functions. Before describing these functions, an overview of the agreements page 23 will be helpful.

[0076] The Agreements page 23 (See Fig. 4) provides a listing 88 of each of the reinsurance agreements the specific user or insurer (in this example XYZ, Inc.) has entered into with the reinsurer. The listing 88 is generally presented in a table format, with each row 90 summarizing the basic terms of each separate agreement. Listing 88, in Fig. 4, includes four agreements in rows 90a-d.

[0077] The first column 91 of each row includes a selection button or icon 92 which can be clicked on to select the agreement as summarized in that row 90. Specific information or terms concerning each proposal are provided in remaining columns 95 under the appropriate

headings, including the "Class of Business" or line of insurance, the original loss warranty or "OLW" amount in millions of dollars, the reinsurance amount or "Limit Upfront", the "ROL Upfront" or rate on line upfront used in calculating the premium, the "Cover Basis", the beginning date ("Term from") and ending date ("Term to") of the policy term, the "Territory", the "Reinstatement" rate and the event "Coverage". Additional columns could be added to include the reinsurer's and/or the user's reference number.

[0078] A Details button 96 is also provided on the Agreements page 23. Clicking on the Details button 96, after selecting an agreement by clicking on the corresponding selection button 92, causes the server 15 to generate Agreement Details pages (not shown) which are similar in appearance to and provide much of the same information about the agreement as is provided on a corresponding Proposal Details pages 40.

[0079] The Agreement Details pages provide a listing of the basic terms of the specific agreement and a listing of headings for the applicable clauses with an associated link to view the specific wording of each clause.

[0080] In order to facilitate use of the interactive system 1, it is to be understood that additional links may be included in the various pages generated. In particular, the button bar 19 (shown in Fig. 2) preferably appears on or as part of a frame surrounding each Proposals page 21 and each Agreements page 23 generated.

[0081] Referring again to Figures 3 and 4, Figure 3 shows the listing 28 of proposals available to the specific cedent, XYZ, Inc., before submission of the selected proposal, which appears at the top of the table. Similarly, Figure 4 shows the listing 88 of agreements entered into between the reinsurer and the specific cedent, XYZ, Inc., before submission of the proposal shown as selected in Figure 3.

[0082] When the user submits the selected proposal for acceptance, by clicking on the submit button 71 on the Submit Proposal page 65 (Fig. 6), the system server 15 withdraws or disassociates the relevant information for the selected proposal from the proposals listing 28 (row 30a in Fig. 3) and adds or associates the relevant information with the agreements listing 88. Figures 8a and 8b show the proposals page 21 as it appears after submission and acceptance of the proposal shown selected in Figure 3. The selected proposal from Figure 3 (row 30a), does not appear in the listing 28 in Figures 8a and 8b. The absence of rows 30c and 30d in Figure 8a and the decrease in the maximum value of the Limits Upfront in rows 30c and 30d of Figure 8b will be discussed below.

[0083] Figure 9 shows the Agreements page 23 as it appears after submission and acceptance of the proposal (row 30a) shown selected in Figure 3. The resulting agreement has been added to the listing 88 and appears as row 90e in Fig 9. If for any reason, problems are encountered in receiving the Acceptance Confirmation page 78 (Fig. 7), the user can confirm whether sub-

mission of a proposal has been accepted by viewing the Agreements page 23 to verify that the resulting agreement appears in the listing 88 thereon.

5 [0084] Essentially simultaneously with generation of the Acceptance Confirmation page 78 and transfer or reassociation of the data associated with the accepted proposal to the agreements page 23, the system server 15 withdraws the accepted proposal from availability for this cedent and recalculates the available allocated capacities.

10 [0085] This recalculation in steps 122, 124 is performed as follows. At first, the capacity used by the accepted proposal is subtracted from the actual value of the capacity per class. For example, the available capacity for aviation was \$ 10,000,000, and the maximum risk of the accepted proposal is \$ 2,000,000, the new available capacity for aviation is reduced to \$ 8,000,000. Then, the available capacity per cedent for all classes of the primary insurer accepting the proposal is reduced by \$ 2,000,000. The same is done with the available capacity per cedent for the corresponding class. Furthermore, the available capacity per type of proposal for the corresponding proposal is reduced by \$ 2,000,000 and/or the capacity per occurrence for the corresponding proposal is reduced by 1. That means, if the system uses the available capacity per occurrence for determining the availability of a proposal, the corresponding counter is incremented (refer to the explanation of the generation of the proposals page 21). After that, the system

15 20 25 30 35 40 45 50

has updated all available capacities. Now, the system identifies the lowest available capacity of this cedent for each of the classes. Then, the system marks all proposals available for this cedent and exceeding its capacity for the corresponding class as "exceeding capacity".

Then the system identifies all other proposals available for this or other cedents exceeding the available capacity per class and marks them with "exceeding capacity". Then the system identifies all proposals available for other cedents exceeding the available capacity per type of proposal and marks them with "exceeding capacity". Then, the system checks the available capacity per occurrence for the corresponding type of proposal and, if the available capacity is zero, marks the proposal of this type with "exceeding capacity".

[0086] Then, in step 126, the system withdraws all proposals marked with "exceeding capacity" (version 1), or adapts the same (version 2).

[0087] The effects of this recalculation and the corresponding withdrawal or adaption of proposals are now explained referring to exemplary situations shown in the figures.

[0088] For example and referring to Figure 3, assume the cedent capacity of XYZ, Inc. is eight million dollars (\$8,000,000) and the selected amount below which the cedent capacity cannot be reduced is zero. Acceptance of the selected proposal in row 30a, with coverage in the amount of six million dollars (\$6,000,000), will reduce the available cedent capacity of XYZ, Inc. to two million

dollars (\$2,000,000). The maximum value of coverage in the proposals in rows 30b and 30e, of Fig. 2, do not exceed the new cedent capacity of two million dollars. Therefore the proposals in rows 30b and 30e will not be withdrawn from availability and will be included in the Proposals page 21 generated after acceptance of the proposal in row 30a.

[0089] The maximum value of coverage in the proposals in rows 30c and 30d in Figure 3 exceeds the currently available cedent capacity of two million dollars. The system server 15 may be programmed to withdraw from availability to a cedent any proposal whose maximum value of coverage exceeds the then available cedent capacity (version 1). With the system 15 so programmed, upon acceptance of the proposal in row 30a, the proposals in rows 30c and 30d (each providing a maximum coverage of four million dollars) would be withdrawn from availability to cedent XYZ, Inc. and the Proposals page 21 generated thereafter would appear as shown in Figure 8a.

[0090] The system server 15 may be programmed to reduce the maximum value of coverage of any remaining proposals for the cedent to the then available cedent capacity (version 2). With the system 15 so programmed, upon acceptance of the proposal in row 30a, the maximum value of coverage (Limit Upfront) for the proposals in rows 30c and 30d would each be reduced to two million dollars, and the Proposals page 21 generated thereafter would appear as shown in Figure 8b.

[0091] For purposes of explaining the operation of the system server 15 in withdrawing from availability proposals whose acceptance would exceed the per occurrence capacity, assume the initial capacity allocated by the reinsurer to aviation proposals equivalent to the proposal shown in row 30a of Figure 3, is thirty million dollars. The value for the available per occurrence capacity entered into the system server 15 for that proposal could be the number 5, to correspond to the maximum number of such aviation proposals the reinsurer can accept (based upon the maximum amount of coverage available for each proposal). Upon acceptance of such an aviation proposal, the value for the available per occurrence capacity would be reduced by one (for example the corresponding counter is incremented). If the same aviation proposal was initially made available to 10 cedents, once five accepted this proposal (counter value = 5 = maximum value), the proposal would be withdrawn from availability from the remaining five and would not appear on their respective Proposals page 21. It should be noted that the proposal may have been previously withdrawn from availability from one of the remaining five cedents if acceptance of the proposal by that cedent would reduce that cedent's then available cedent capacity below the selected amount.

[0092] The value of the available per occurrence capacity, in the example provided, could also be initialized at thirty million dollars with this value being reduced each time a proposal is submitted and accepted by the

maximum value of the Limit Upfront, or six million dollars. Again, once five such proposals are accepted, any remaining proposals will be withdrawn from availability.

[0093] It is also foreseen that with the value of the available per occurrence capacity initialized at thirty million dollars, the available per occurrence capacity would be reduced by the selected value of coverage or limit upfront upon the acceptance of each submitted proposal. In such an application, the system server could be

programmed to reduce the maximum value of coverage of any remaining proposals to the value of the recalculated or the then available per occurrence capacity, if the maximum value of the coverage would otherwise exceed the then available per occurrence capacity. Continuing with the example above, if proposals were accepted from three cedents submitting the aviation proposal of row 30a with the maximum Limit Upfront of six million dollars and from two cedents submitting the same aviation proposal but with a reduced Limit Upfront

of four million dollars each, the system server 15 would then reduce the maximum value of the coverage of any of the remaining aviation proposals (like row 30a) to four million dollars. Upon acceptance of one or more additional aviation proposals whose combined coverage amount equals four million dollars, any remaining aviation proposals corresponding to the proposal of row 30a are withdrawn from availability.

[0094] It is to be understood that the programming logic utilized in determining the value of the available allocated capacity and whether acceptance of additional proposals would reduce the available allocated capacity below a selected amount could be varied. For example, using the example above relating to cedent capacity, the server 15 could be programmed to set or establish a value for a cedent's maximum capacity at ten million dollars.

A value for a utilized capacity could initially be set at zero. Upon acceptance of a proposal utilizing five million dollars in capacity for the cedent, the value of the utilized capacity would be increased to five million dollars. The server would then withdraw from availability any proposals whose acceptance would increase the utilized capacity above the maximum capacity.

[0095] It is to be understood that the steps of setting a value for a cedent's maximum capacity and setting an initial value for a utilized capacity (i.e. at zero) is the same as or equivalent to initializing or establishing on the server a value for an available risk assumption capacity. It is also to be understood that the step of increasing the utilized capacity upon acceptance of a proposal

is the same as or equivalent to recalculating the available risk assumption capacity upon acceptance of an offer. Further, it is to be understood that the step of withdrawing from availability any proposals whose acceptance would increase the utilized capacity above the maximum capacity is the same as or the equivalent to the step of withdrawing from availability any proposals whose acceptance would reduce the available risk assumption capacity, as recalculated, below a selected

amount.

[0096] The available capacity generally refers to the maximum capacity less the utilized capacity. The selected amount below which the available capacity cannot be reduced is typically zero. However, it is of course possible to allow different positive or negative values based on underwriting considerations. In determining whether acceptance of a proposal would increase the utilized capacity above the maximum capacity, the program must first subtract the utilized capacity from the maximum capacity which is the same as recalculating the available capacity which would result from acceptance of the proposal. Determining whether the increase in the utilized capacity will result in a value which exceeds the maximum capacity is the same as determining whether the corresponding reduction in the value of the available capacity will reduce that value below the selected value, zero.

[0097] It is to be understood that as used herein reference to the step of withdrawing a proposal from availability should be interpreted broadly enough to incorporate the step of reducing the maximum value of coverage for any one proposal at least to the then current value for available capacity, including either cedent capacity or per occurrence capacity.

[0098] In the system and method as described with reference to the sales of original loss warranty type reinsurance, the method is generally utilized on an annual basis. The reinsurer calculates and allocates its capacity on an annual basis and reinitializes values for the per occurrence and cedent capacities in the system server 15 at the beginning of every year. Once a cedent's allocated cedent capacity is utilized, the cedent cannot purchase additional reinsurance through the system until new capacity has become available, for example by lapse of other contracts. Once the per occurrence capacity for a particular proposal is utilized, no additional policies for that proposal can be sold until new capacity has become available, for example by lapse of other contracts.

[0099] It is to be understood that the system server 15 could be programmed to permit the reinsurer to reinitialize the values for the available allocated capacities at any time.

[0100] It is foreseeable, that the system could be utilized to increase or decrease the available allocated capacity at any time (if regulations permit) depending on various factors including the reinsurer's and cedents' changing financial conditions. The system server 15 could be programmed to automatically make available upon an increase in available allocated capacity of proposals which were previously withdrawn or new proposals added to the system.

[0101] In a second embodiment, the system is programmed such that brokers can be registered as selected users. The system and method work in the same way as described above, except that the broker is not allowed to submit a proposal without identifying its client.

The system is programmed such that, in step 116 of Fig. 10, after selecting the submission of the proposal by the broker, a menu appears, wherein all primary insurers selected to be users of the system, are shown. The broker

- 5 identifies the primary insurer for which the proposal should be submitted, and then the method proceeds in the same way as described above. In the second embodiment, the system may be programmed such that the broker can view every proposal available through the
- 10 system or in the same way as in the first embodiment such that the broker can view only selected proposals. The system is programmed such that a broker can submit a proposal more than once.

- [0102] In a third embodiment, the step 116 of submitting the proposal includes the option to reserve the proposal instead of submitting the proposal for acceptance by the reinsurer. The reservation is made for a predetermined time. In a further development of this embodiment, the reservation is accepted only, if the corresponding proposal is still available in a number exceeding a certain lower limit. For example, if the capacity per occurrence of this proposal was originally 5, the lower limit may be set to a number of 2.
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- 20

- [0103] If the available capacity per occurrence is reduced to 2, a reservation will not be accepted by the system.
- 25

- [0104] The features of all embodiments and versions may be freely combined. For example, the features of versions 1 and 2 may be combined, resulting in that the specific users and/or specific proposals are handled according to version 1 or 2. If combined with the second and the third embodiments, the application of versions 1 or 2 may depend on the available capacity per occurrence or others. For example, the system could be programmed such that a cedent can submit a proposal more than once or a broker can submit a proposal only once.
- 30
- 35

- [0105] Preferably, all of the above described steps and operations are programmed in the application server in program modules. One possibility of such program modules is described, as an example only, in the following.
- 40

- [0106] As already described above, the reformulation of a plurality of proposals and the determination available risk assumption capacities allows the electronic distribution or selling of reinsurance at all. The above described technical adaption of reinsurance selling allows that a data processing system electronically recalculates the available capacities after acceptance of one of the proposals and electronically determinates the proposals to be withdrawn or adapted in reaction to the recalculated available capacities. Therefore, the system preferably includes a first module for electronically accepting a submitted offer for accepting a proposal. The first module informs a second module, if a proposal is accepted. In reaction, the second module recalculates the available capacities and outputs the recalculated capacities to a third module. The third module is pro-
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- 55

grammed to check the availability of the proposals and to withdraw or adapt the proposals as described above. The cooperation of these three modules allows reinsurance selling in an autonomous manner by a machine without any involvement of a human being on the reinsurer's side.

[0107] Preferably, the first module is programmed such that the user may change conditions of the offer, such as the maximum risk coverage. Therefore, the autonomous reinsurance selling system even allows amendments of the condition.

[0108] It is clear that the module may well be programmed such that the change of other conditions such as the rate on line and the like is possible as well. In this case, the first module is programmed such that certain ranges for changes of the conditions are initialized and checked after the user submitted the corresponding offer to accept a changed proposal. This "tailoring" capabilities of the method and the system makes the selling of the reinsurance in an autonomous technical system possible, because reinsurance can not be sold as standard insurance products. Therefore, a flexible response to the customer needs and requirements is necessary and is provided by the method and system described above.

## Claims

1. A method for a reinsurer to assume one or a plurality of monetary risks from one or a plurality of risk cedents using a system comprising a server (5, 6) and an interface (7, 8) to a network (9), comprising the steps of

posting on the server a plurality of proposals to assume selected risks of one or a plurality of risk cedents such that said proposals are viewable through a computer network, initializing on the server an available risk assumption capacity of said reinsurer associated with said proposals, enabling electronic submission via the interface of one of said proposals associated therewith as an offer for acceptance by said reinsurer by one of said cedents, and programming the server to perform the following steps in an automatized manner:

- a) electronically accepting, by said reinsurer, said offer submitted,
- b) electronically recalculating said available risk assumption capacity upon accepting said offer, and
- c) electronically withdrawing from availability or adapting any of said proposals whose acceptance would reduce said available risk assumption capacity, as recalculated,

below a selected amount.

2. The method according to claim 1, wherein  
5 said posting step is adapted to post one or more of said proposals such that said proposal(s) is/are viewable by one or a plurality of selected risk cedents only through the computer network.
3. The method of claim 2, wherein  
10 the initializing step is adapted to initialize on said server an associated available risk assumption capacity of said reinsurer to accept said proposal(s) from said selected risk cedent(s).
4. The method according to one of claims 1 to 3,  
15 wherein the initializing step is adapted to initialize an available cedent capacity for each of said cedents and an available per occurrence capacity for each of said proposals,  
20 the recalculating step is adapted to electronically recalculate said available cedent capacity of said cedent and said available per occurrence capacity of said proposal upon accepting said offer, and  
25 the withdrawing step is adapted to electronically withdraw from availability or adapt any of said proposals whose acceptance would reduce said available cedent capacity or said available per occurrence capacity, as recalculated, below a selected amount.
5. The method according to one of claims 1 to 4,  
30 wherein said proposals include an amount of coverage corresponding to a maximum amount of coverage to be provided and  
35 said step of enabling electronic submission further comprises the step of  
enabling said cedents to electronically decrease said amount of coverage of one of said proposals before submission of said proposal for acceptance; and  
40 electronically calculating a premium based on said amount of coverage selected by said cedent.
6. The method according to one of claims 1 to 5 further comprising the step of  
45 electronically providing confirmation of acceptance of said offer to said cedent which submitted said offer.
7. The method according to one of claims 1 to 6 further comprising the step of  
50 posting said offer which was accepted on said server so as to be viewable by said cedent which submitted said offer.
8. The method according to one of claims 1 to 7,  
55 wherein

said step of providing access through said computer network includes limiting access of each of said cedents to view only those of said proposals which are specific to said cedent.

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9. The method of one of claims 1 to 8, wherein the step of enabling electronic submission includes the step of enabling electronic submission of a reservation of one of said proposals by one of said cedents.

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10. The method of one of claims 1 to 9, which is adapted to allow a representation of said cedent(s) by a representative such as a broker.

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11. A computer program comprising computer program code means adapted to perform all steps of one of claims 1 to 10 when said program is run on a computer.

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12. The computer program as claimed in claim 11 embodied on a computer readable medium.

13. A data processing system for allowing a reinsurer to assume one or a plurality of monetary risks from one or a plurality of risk cedents, comprising

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a server (5, 6), and  
an interface (7, 8) to a network (9) through which other computers are connectable to the interface,

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wherein the server includes  
storing means for storing a plurality of proposal to assume selected risks of one or a plurality of risk cedents and an available risk assumption capacity of the reinsurer associated with the proposals, and

35

wherein the server includes  
a first module for electronically accepting, by the reinsurer, an offer for accepting one of the proposals submitted by a risk cedent electronically via the interface,

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a second module for electronically recalculating the available risk assumption capacity upon accepting the offer, and

45

a third module for electronically withdrawing from availability or adapting any of the proposals whose acceptance would reduce the available risk assumption capacity, as recalculated, below a selected amount.

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14. The system according to claim 13, wherein the third module is adapted to provide those proposals whose acceptance would reduce the available risk assumption capacity in accordance with the recalculation result of the second module below the selected amount with a mark in reaction to the recalculation result output by the second

module, and to withdraw or adapt the marked proposals.

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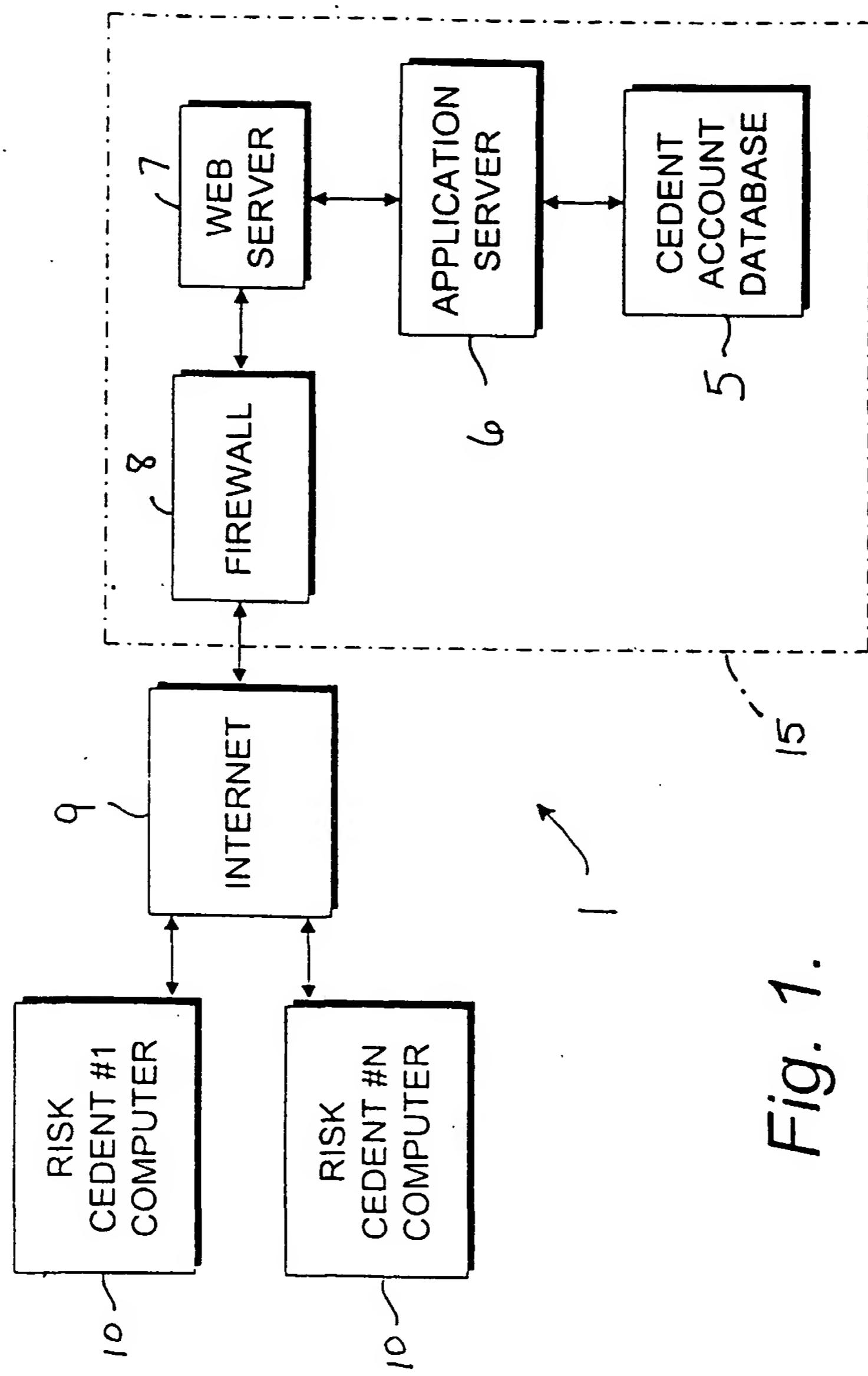


Fig. 1.

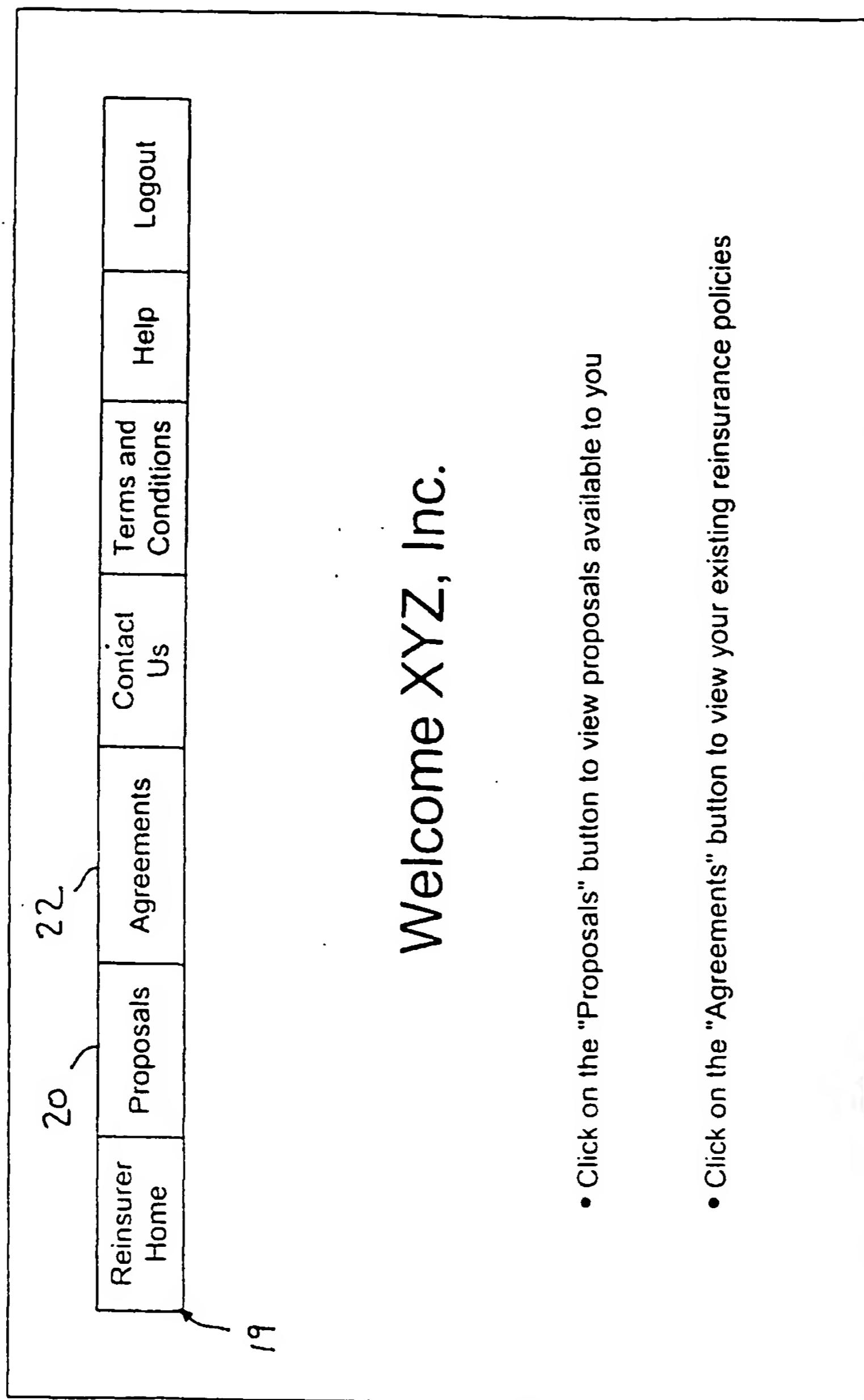


Fig. 2.

Proposals to XYZ, Inc.										
	Class of Business	OLW \$M	Limit Upfront	ROL Upfront	Cover Basis	Term from	Term to	Territory	Reinstate	Coverage
31	Aviation	1,500	6,000,000	5.00%	L.O.D.	01/01/00	12/31/00	World	1@100%	1st Event
33	Aviation	800	1,000,000	15.00%	L.O.D.	01/01/00	12/31/00	World	1@100%	1st Event
32	Energy/Marine	5,000	4,000,000	35.00%	L.O.D.	01/01/00	12/31/00	Europe	1@100%	1st Event
30	Non-Marine	800	4,000,000	15.00%	L.O.D.	01/01/00	12/31/00	USA	1@100%	2nd Event
0	Space	250	2,000,000	30.00%	L.O.D.	01/01/00	12/31/00	Launch Vehicle Only	1@100%	1st Event

Fig. 3.

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Q5      Agreements of XYZ, Inc.

Class of Business	OLW \$M	Limit Upfront	ROL Upfront	Cover Basis	Term from	Term to	Territory	Reinstate	Coverage
Aviation	5,000	9,000,000	36.75% (w/5% Brkrg)	L.O.D.	01/01/00	12/31/00	Europe	1@120%	2nd Event
Aviation	600	1,000,000	25.00%	L.O.D.	01/01/00	12/31/00	World	1@100%	1st Event
Non-Marine	800	1,000,000	15.00%	L.O.D.	01/01/00	12/31/00	USA	1@100%	1st Event
Energy/Marine	1,000	1,000,000	12.50%	L.O.D.	01/01/00	12/31/00	Asia	1@100%	1st Event

Q6 → Details

Q5 →

Q1 →

Q2 →

Q3 →

Q4 →

Q5 →

Q6 →

Q7 →

Q8 →

Fig. 4.

**Proposal Details**

To submit proposal, enter data where requested and click 'NEXT' ↗ 63

Class of Business: Aviation

Treaty Type Excess of Loss

OLW \$1.500M

Limit Upfront \$ 6,000,000 ↘ 46

ROL Upfront 5.00% ↗ 45

Priority \$100,000

Cover Basis L.O.D.

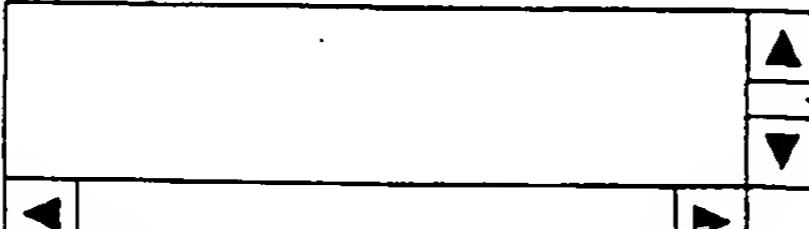
Term From 01/01/2000 to 12/31/2000

Territory Worldwide

Reinstatements 1@100%

Coverage 1st Event

Involve Broker No ↘ 48

Name and address of broker  
 ↗ 49

Your Reference ↗ 50

Payment Terms Payable within 45 days after inception

**next** ↗ 60 **cancel** ↗ 61

The following clauses apply to this proposal: ↗ 54

Name	Description	Wording
	Excluding: Errors and Omissions written as such	<b>wording</b>
	Excluding: Financial Guarantee	<b>wording</b>
	Excluding: Aviation Losses emanating from Other Accounts	<b>wording</b>

40 ↗

41 ↗

43 ↗

48 ↗

49 ↗

54 ↗

55 ↗

Fig. 5.

**Submit Proposal**

Please check the general terms once again and click 'submit' to bind coverage.

Class of Business: Aviation  
 Treaty Type Excess of Loss

75

OLW	\$1.500M
Limit Upfront	\$ 6,000,000
ROL Upfront	5.00%
Priority	\$100,000
Cover Basis	L.O.D.
Term	From 01/01/2000 to 12/31/2000
Territory	Worldwide
Reinstatements	1@100%
Coverage	1st Event

68

Involve Broker No

Your Reference AV001

Payment Terms Payable within 45 days after inception

submit

back

cancel

71

72

73

65

Fig. 6.

79 ~ **Proposal Accepted/Contract Closed**

Thank you for purchasing this Reinsurance.  
Our Reference is: N/00007/99/0/00 ~ 80

Click the "Print Premium Closing" button to print a billing document for the policy.

Click the "Print Covernote" button to print a copy of the policy.

Click the "Proposals" button to view remaining proposals.

<a href="#">Print Premium Closing</a>	<a href="#">Print Covernote</a>	<a href="#">Proposals</a>	<a href="#">Agreements</a>	<a href="#">Logout</a>
82	83	84	85	86

78

*Fig. 7.*

Proposals to XYZ, Inc.						
Class of Business	OLW \$M	Limit Upfront	ROL Upfront	Cover Basis	Term from	Term to
Aviation	800	1,000,000	15.00%	L.O.D.	01/01/00	12/31/00
Space	250	2,000,000	30.00%	L.O.D.	01/01/00	12/31/00

Fig. 8a.

35		Proposals to XYZ, Inc.						35		
31	Class of Business	OLW \$M	Limit Upfront	ROL Upfront	Cover Basis	Term from	Term to	Territory	Reinstate	Coverage
○	Aviation	800	1,000,000	15.00%	L.O.D.	01/01/00	12/31/00	World	1@100%	1st Event
○	Energy/Marine	5,000	2,000,000	35.00%	L.O.D.	01/01/00	12/31/00	Europe	1@100%	1st Event
○	Non-Marine	800	2,000,000	15.00%	L.O.D.	01/01/00	12/31/00	USA	1@100%	2nd Event
○	Space	250	2,000,000	30.00%	L.O.D.	01/01/00	12/31/00	Launch Vehicle Only	1@100%	1st Event

36 - Details

37 Refresh

Fig. 8b.

21

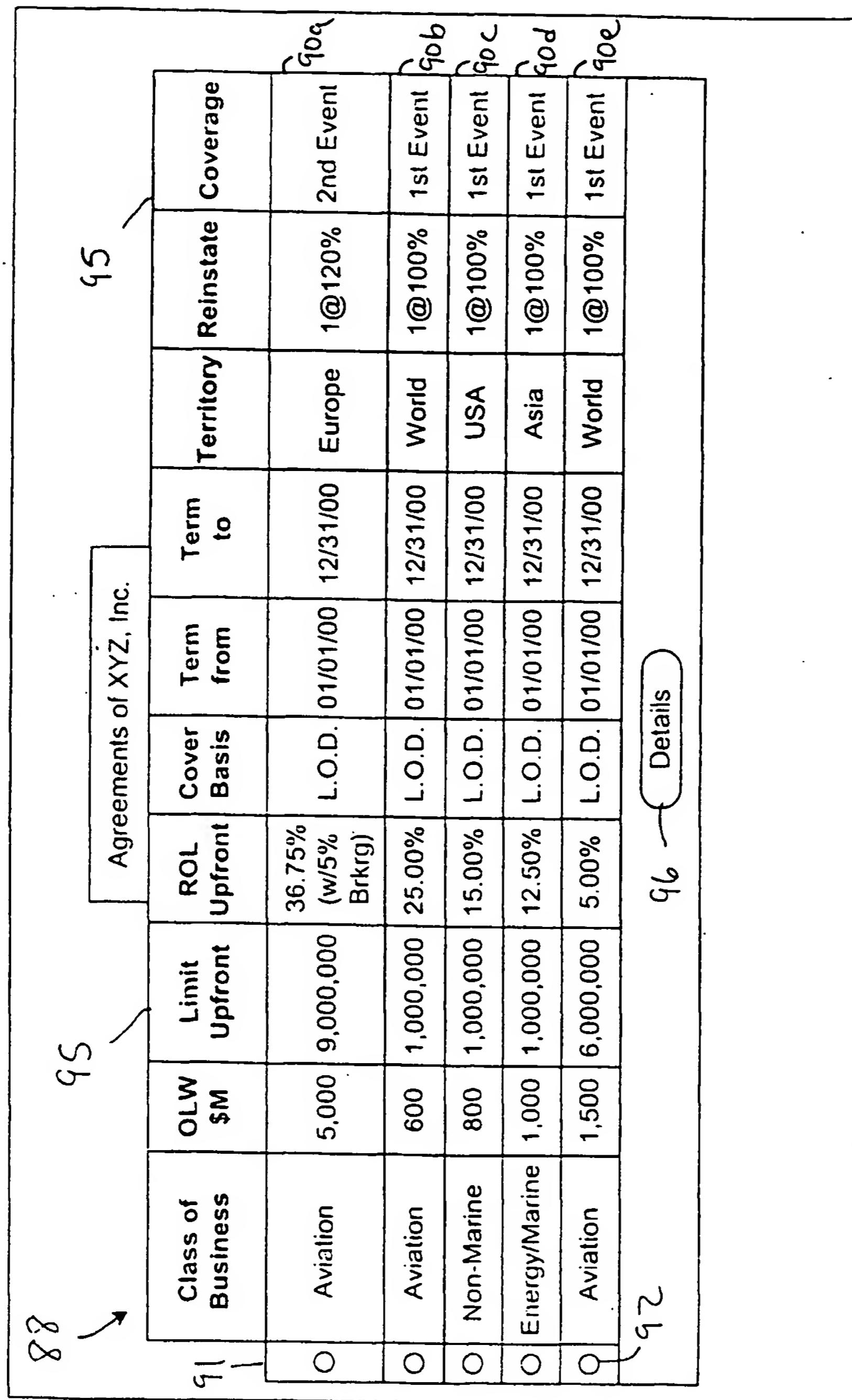


Fig. 9.

